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University News

NDAY, SEPTEMBER 11, 1989

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nual Convocation of the Guru Nanak Dev University. From L to R : Mr. Gurdip Singh Randhawa, Vice-Chancel
S.S. Ray, Governor of Punjab & Chancellor and Mr. P. Shiv Shankar, Union Minister for Human Resource Development, who delivered the convocation address.

Central Institute of English And Foreign Languages

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K. Jayashankar
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I
NDER SINGH

Higher Education For All?

Mamota Das*

Education is the key to unlock the main gate to civilization and modernization. It is the most important means to develop individuals and nations, and to bring about the desired social reforms in this fast changing world of ours. Education is not only used to bring about constructive and desirable social, economic and political changes and development, it is also the immediate answer to "Rising Expectations" of the people everywhere today.

Education is the solution for world peace, because it is one of the universal ingredients in the development of mankind and it is indispensable for economic growth and prosperity. Although the world is changing more rapidly than its educational systems, yet education continues to protect society, to promote knowledge and to preserve stability by passing on the culture from one generation to another ; at the same time it plays a pioneering role in innovation.

Education is the right to peace, security and better understanding of all mankind, because in educational and cultural exchange programmes between the developed countries and Third World countries lie the solutions of the three greatest problems of humanity : ignorance, hunger and illness.

The university in the Third World countries today is on the threshold of a new era. The population explosion, the rapid advance and expansion of new areas of knowledge, the increased reliance of social institutions on the faculty talent in solving social and scientific problems, and the resultant increased interest of all high school students in college and university degrees have contributed to the need of reshaping the university responsibilities and goals.

Despite considerable educational planning activities over the years, educational administration in general and university administration in particular, have until very recently been thoroughly neglected by educators and planners alike. However, the kind of university administration provided by the universities of the Third World countries for their students today, will play a major role in determining the shape of higher educational development and progress in the Third World.

Higher education occupies an important place in the process of nation building. Like the other Third World countries, India today is also engaged in building the nation right from the grassroots. Of a number of variables of development, education in general, and higher education in particular, should be deemed as one of the powerful factors of development.

The present system of higher education is a transplantation of British system. Higher education has vastly expanded since 1947. At that time there were 700 colleges and 20 universities. Substantial investments have been made by the Centre and the various State

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Governments in institutions for higher learning and now there are over 180 universities in the country and over 6000 colleges with a total enrolment of 36.81 lacs of whom 11.25 lacs are women. But the infrastructure for education has proved inadequate and the results have been disheartening leading to few major fallacies. The growth in higher education has largely been quantitative. What is worse is that there is considerable waste of both human and material resources. This is indicated by the large number of dropouts, low level of marks obtained by students, unsatisfactory pass percentage, poor academic achievements and the general lack of competence among the products of colleges and universities and the educated unemployed.

The number of educated unemployed in India is expected to reach a staggering figure of 24.3 million by the end of 1990. According to Mr. M.R. Kolhatkar, Adviser (Education), Planning Commission, the net addition to the labour force in India was expected to increase to 34 million in the age group five plus during 1980-85. In the country paper on "human resources, skill development and employment in India", submitted at the third meeting of planners of SAARC countries, Mr. Kolhatkar said the backlog of "unusual status" unemployment was around 12 million. The magnitude of the employment to be generated during the Sixth Plan was to the tune of 46 million. According to Mr. Kolhatkar, the employment generated, although in accordance with the targets, was not enough to wipe out unemplyoment. The overall magnitude of employment to be generated during the Seventh Plan period, he said, was estimated at 48.58 million for the age group five plus, comprising the backlog of 9.2 million and net addition to the labour force of 39.98 million.

Higher education seems to be caught between the traditional expectations and the new demands. Young students call for education that helps them relate formal curricula and courses to social needs, and search for solutions to societal problems. Middle aged persons in employment call for on-the-job arrangements in education that help them to keep pace with technological progress and need for acquiring higher skills. Disadvantaged persons call for equal opportunities in education that will help them gain knowledge and skills and join the mainstream of society.

In a developing country like ours, higher education should have pointed goals. This leads to a few queries. Is higher education to promote comm ment to the pursuit of excellence ? or, Is hig education for all ?

Union Minister of State for Education a Culture, L.P. Shahi called for democratisation higher education to make it accessible to all secti of the community. Inaugurating the 'two st National Architectural Design Competition for proposed campus of the Indira Gandhi Natio Open University (IGNOU) at New Delhi, Mr. Sha said the very concept of having an open univers was to augment opportunities for higher educat in tune with the New Education Policy. Stress the importance of making education available people of all regions, classes and communities, Education Minister expressed happiness at the sp and seriousness with which the Open University been set up within a record time of a few ye Emphasising the imperative need of making educati accessible to rural and tribal populace of country, Mr. Shahi stated that a fresh look may ha to be taken at the instructional system and academ programme of the Open University so that it beca more relevant to the convenience and needs of th vulnerable sections of the community.

India being a secular, socialistic republic whe the democratic rights of individuals are respect it is the duty of the society to provide equal opp tunities to all to receive higher education. Thou we have after independence made tremendo scientific and technological advances, accelerat our economic growth and have gained politi consciousness and social awareness, we are unab to keep pace with the developmental growth due population explosion, which invariably is upsetti all the calculations of the educational planne Many measures including education are being tak to promote family planning. In view of the high unstable social and economic structure of t country, higher education at present can be for provided they have the necessary talent to purs higher education, thereby suggesting that educatio development should not be conical but rather bar shaped in structure. There is no meaning in bui ing a super structure of education when the base not sound. It will tumble down like a buildi having no proper plinth.

One wonders whether a country like India c afford to have such an enormous investment Higher Education, when it has not been able to g compulsory free education even upto 11, not

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C. P. T. R. I., MYSORE

speak of 14+, which has been provided in the constitution. As the primary task of the country is to make the people literate and to give them minimum school education upto class VI+ VIII, it will not be possible for us to provide such a huge investment on higher education in the years to come. Therefore, there is a need for selective enrolment to higher education and for drawing up a programme of purposeful education for those coming out of the school. The educational system will have to be reorganised so that there is proper diversification after 6th, 8th, 10th and 12th classes in order to give them necessary vocational training.

The Chairman of the Economic Administrative Reforms Commission, Late Mr. L.K. Jha, had on January 5, 1985 recommended that recruitment to Government jobs be done at the phase two (+2) level of education after which the recruit may be given a three-year course in the subject relevant to his job. The advantages of making such a change, particularly if banks and business houses follow suit, would be that the cost of higher education would be met substantially by the employers. Once recruitment of meritorious students is done then others could concentrate on vocational training. Also, then people going in for higher education would essentially be those who are deeply and genuinely interested in learning and research. But prominent educationists and Vice-Chancellors agreed to disagree sharply on delinking degrees from jobs in Central Services in a conference held at New Delhi on October 14, 1985.

Uniformity of the educational programme may not be able to stand for long and the pupil's intelligence, academic inclination, flair for research, scholastic aptitude, interests, his social background and other relevant personal and social characteristics will have to be taken into account before drawing up an educational programme for him. Hence the American system of admitting candidates on research studies on the basis of aptitude tests and qualifying tests with confirmed aptitudinal slant will have to be favoured along with non-testing measures. But before making higher education selective and purposeful, it is necessary for the government to declare that a degree is not essential for employment in secretarial services. Recruitment to Ministerial and Accounts services should be made after a suitable training of matriculates through secretarial and accounts courses organized in Junior colleges. Only students with high academic attainment should be allowed to proceed for collegiate education for obtaining the first degree. Over the first degree courses will have to be reorganized so that they are relevant to life. The district should be the unit of planning both for economic development and educational progress. The educational programmes should be inter-linked with the developmental programme in such a manner that the majority of the trained graduates are able to find suitable employment in the district itself.

In my opinion, higher education should not be the birth right of everyone for it needs brain and dedication to pursue such education. It is seen that out of approximately 3 million undergraduate students, only half a million or so are truly and genuinely interested in higher education. The rest are there because they have no where else to go. Were the organised sector of the economy working better and generating more jobs, young boys and girls passing out from school would be able to find jobs for themselves. Today they cannot. Why ? One, becuase they are not properly trained, and two, because the number of jobs available is limited. If the rush in colleges, is to be avoided, more jobs will have to be created at the middle level for which appropriate kind of training will have to be given at the school level.

Another way to enforce selectivity in higher education enrolment would be to raise the tuition fees in colleges so high that colleges pay their own way and do not remain dependent on the public exchequer for funds. The only objection to this would be that the poor students who cannot pay the fees would be deprived of higher education. This objection can be met by instituting a liberal system of fee-exemptions and scholarships for the poor meritorious students. Only the cost of educating this category of students should be a charge on public exchequer. For the rest only those, including girl students, who can pay for it should be allowed to get university education. Mr. B.M. Bhatia, former Principal of Hindu College, Delhi and an eminent economist, has advocated the ending of higher education subsidies for students with affluent backgrounds.

It seems limiting of higher education to the few has a definite rationale. Indeed so convincing is this

(*Continued on page 9*)

A Strategy for Balanced Development
An Eco-Systems' Approach

J. C. Pant*

It has been well said that growth for the sake of growth is the philosophy of a cancer cell. When your daughter has grown to a reasonable height you look forward to her growth in other directions such as the intellect, music, the arts, sports, etc. In other words, you look forward to her balanced development. Similar ought to be our attitude towards development of our country. It is time we looked back to evaluate the manner in which we have developed over the plan period.

Have our past investment policies been in the long term interest of the masses or have they been at the cost of their long term interest ? Why has mass poverty not been ameliorated in spite of the fact that this has been the main objective of each five year plan ? Has this been predominantly a failure of implementation or was a subtle shift in policy and priorities from one plan period to the next the main reason for this failure ? Was large scale damage to the eco-system due to massive investment in gigantic hydro-electric projects justified, now that it transpires that due to heavy siltation effective life of these projects is far less than was trumpetted by the project engineers to make them look attractive investment proposals before they were sanctioned ?

The licencing policy which enabled a large number of two-wheelers and four-wheelers to clog our highways at the cost of a stable public transport system thereby polluting the environment also, may be mentioned as an instance in which the long term interest of the masses was not taken care of adequately. While investigation of the motives which caused such shifts in public policy and priorities would be of academic and historical interest it would be reasonable to assume that unless enlightened public opinion is now vigilant such unfavourable shifts in public policy cannot be ruled out in future also. This paper is intended to throw up in bold relief some urgent issues of public importance which may be kept in view by our planners and administrators while future development plans are drawn up.

Women's Awakening

A very large percentage of our women folk continue to be burdened with age old superstitions and beliefs which prevent them from applying themselves to their immediate problems. It must be realised that a vibrant eco-system offers fuel, fodder and clean drinking water in plenty to the mass of our population and correspondingly makes the life of their women folk easier. In other words, large scale damage to the eco-system directly affects the long and short term interests of the masses and their women folk adversely. Future massive capital investments, therefore, should be strictly scrutinized to assess their capacity to restore the already depleted eco-system rather than merely preventing further ecological damage. It has also been noticed that strategies of women's development adopted so far have tended to ignore their cultural roots due to which they have not quite clicked. Neither have these strategies been able to involve the mass of our women folk. It needs to be realised that the leadership for women's awakening has of necessity to come out of the mass of our women folk. This cannot be done by ridiculing their cherished notions or by ignoring their perceptions. Identifying leaders from among them and encouraging them to come out of their hearths and homes to assume social responsibility of making their sisters self reliant appears to be the only feasible way out. Our Sitas and Savitris have to make bold and assume leadership of this movement. Perhaps, selected voluntary agencies could be motivated to work in this area apart from established government departments changing their orientation. Opportunities for girls' education must expand and teaching in pre-primary and primary education should gradually be handed over entirely to women teachers. Adult education and non-formal education should concentrate totally on women's and girls' education.

Men's Emancipation

Gandhiji once said that there is enough for everyone's need but not enough for everyone's greed. Rampant consumerism seems to have gripped the thought processes of our social elite and seems to have generated an inexhaustable greed in them. Conspicuous consumption is fast acquiring social status due to which there is an unseemly com-

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tition to acquire wealth in the shortest possible ne. The existence of a parallel black money onomy is further fueling conspicuous consumption. It is this black money which is financing the owry system and fanning social inequalities and rrupting the youth of our country. There is gent need to break this vicious hold of black money er our social system. With a Constitution which nphasises social justice and the dignity of the individual, we must sit up and take note of the steep cline that our social values have taken. We must ow begin to practice restraint in public display of ealth and try to promote a climate of saving. Social nd individual savings and the energy generated by stention from conspicuous consumption could be rofitably ploughed back into schemes for the benet of those who save. We must now reassert the lory of simplicity and the common touch. To conume what is not within easy reach of the poorest in he land should begin to stir our conscience. Emancipating the minds of men from the scourge of onsumerism must become our foremost concern in he next decade.

opulation Control

Population explosion is everyone's baby but does ot appear to be everyone's perception. Enough of ass education regarding the perils of population as taken place. Now is the time to act. A law egarding population control needs to be enacted and ublic opinion in favour of such a legislation must e built up. Social benefits should henceforth be vailable on family basis assuming them to have two hildren. A family having a third child should be ompelled to contribute one hour free labour per ay or 365 hours per year for planting trees in the earest woodlot. Childless couples should be ncouraged to adopt orphans and single child families hould be honoured. Only one child per family hould be offered employment in public services. Minimum age for marriage needs to be revised upards and bachelorhood needs to be given respectaility. This greatest of man-made calamity needs to e recognized in common perception and corrective cial, political and administrative measures have to e planned and implemented.

estoration of the Eco-System

Concern for the purity of the environment has, nfortunately, appeared on the social scene very late the day. This is because we have not yet learned pay attention to what our cultural heritage has bequeathed to us. A decent life is only possible in harmony with nature has been an age old perception in India. Our fragile eco-system has all along our plan period been taken for granted. We have taken pride in conquering nature because of which coexistence with nature never occurred to our modern elite thinkers and planners. Thus, the process of planned economic development has totally ignored the ecological damage that was silently but surely taking place all around us. As most of our development projects have upset the eco-system, employment generation such as it has taken place in the plan period has not benefited the masses to the extent intended. We have now to initiate another kind of a development process which will regenerate the eco-system. This change in the strategy of employment generation is now a must if we want to survive and want the next generation to survive.

Clean air, clean drinking water and clean nourishing food are the three pre-requisites of a decent existence. Thcse require conservation of soil and water and sufficiently extensive vegetative cover. Management of our land and water resources must now receive our highest attention. Greening our common lands should be a major employment generating programme. Reducing costs in agriculture must be attended to by resorting to organic measures of pest control and providing soil nutrients to the soil. Poor returns in agriculture with increasing costs is giving rise to farmer unrest in areas which once led in thc green revolution. Stall-feeding of cattle to conserve biomass and to prevent overgrazing of common lands must be promoted. Can separate management of common lands be considered to prevent their diversion for purposes other than genuine public interests ? Every habitation in the country should have its own woodlot to meet the fodder, fruit, fuel and biomass needs of that habitation. Every road should be lined with trees to counter the pollution caused by the exhaust of motor vehicles.

In the hill regions tourism based on trekking needs to be encouraged. Instead of allowing huge multistorey five-star hotels to come up in future it would be advisable to promote small tourist lodges as extension of existing houses of the Local residents. Hill areas where further road co nstruction is not an economic necessity should not be subjected to dynamite blasting which does irreparable damage to the local flora and fauna. Gentler methods of landscape development need to be resorted to in the Himalayan regions lest our sentinel, the Himalaya is washed down the rivers into the Bay of Bengal.

Cultivable lands in areas higher than 4000 ft. above sea level should be used primarily for fodder cultivation to stall-feed all the cattle there. Growing of vegetables and herbs may also be encouraged as cash crops at high altitudes. Subsidized foodgrains should be made available at fair price shops at these altitudes. Employment generation in the hills should come out primarily from government sponsored tree-plantation programmes to cover bare hills. The prominent hill stations should all develop satellite hill stations to prevent over-crowding and insanitary conditions during peak tourist seasons.

In areas of water scarcity can rainfall on roofs be conserved for use as drinking water ? Every village and town should be geared to store rain water for irrigation and for water supply systems. Our towns are all using potable water for flushing their lavatories and irrigating their parks and lawns while large areas of our country are short of drinking water. Engineers and technical personnel need to be oriented in restoration of the eco-system. Administrators and managers need to be made aware of this change in the strategy of generating employment so that future capital investment projects are scrutinized before it is too late.

Employment Generation

Existence of waste of all kinds is a prominent feature of our landscape. If we want to make our environment livable, proper management of waste seems to be inescapable. Can we not generate employment in the cottage industry sector by using the locally available waste as raw material ? Thus, restoration of the eco-system and management and recycling of waste should be the two prominent areas to generate employment in future.

These are issues which are easier stated than carried forward. They would need to be discussed by our thinkers and men and women of action. Our men and women of letters will have to leave their ivory towers to mingle with our men and women of action. Converting thought into action is one of the rarest of phenomena which we will have to multiply on a large scale. Our men and women of action are ever keen to explore and experiment but they need encouragement and support. Our best ideas and latest techniques need to be tested in the light of the experience of our men and women of action. Mao's dictum to go to the people to test your ideas is a piece of practical advice. This may be adopted by government departments, public sector undertakings and organised industry as a method of correcting the distortions that have crept in their working over the years as a result of their growing distance from reality. Science and technology have united the whole world so effectively that we will all now either swim or sink together. No one segment of our population can now hope to survive in isolation. So the only alternative is that all should cooperate to survive. The physical and intellectual resources of all the peoples of the world now need to be pooled to build a better new world.

The next question that arises is—can a better new world be created without making it safe for democracy ? Clearly, this does not appear to be possible till wars are eliminated from the face of this planet. It must be realised that ecologically the world is one and it becomes a question of saving this planet from future destructive wars and ecological disasters. The Indian ocean cannot be unconcerned about the oil spills off the coast of Alaska just as the Indian people cannot be indifferent to the Iraq-Iran conflict.

It is well known that wars are made in the minds of men and it is in the minds of men that wars will have to be eliminated. But how do we eliminate wars when the merchants of death and the arms manufacturers of the world are busy promoting wars in the minds of men. Fortunately, wars have seldom been made in the minds of women. Therefore, women marching in the vanguard of future social transformation is the surest guarantee for a world without wars and a world safe for democracy. In order to bring about change around us we will have to start by making a change within ourselves. This struggle to make a better new world and a world safe for democracy therefore, must begin in the minds of men. □

TO OUR READERS

Knowledgeable and perceptive as they are, our contributors must not necessarily be allowed to have the last word. It is for you, the readers, to join issues with them. Our columns are as much open to you as to our contributors. Your communications should, however, be brief and to the point.

The Nature of University

While speaking of the nature of University, Hon'ble Shri P. Shiv Shankar, Union Minister for Human Resource Development said, "Whatever be the dimension of activity, the University is distinguished by its relentless and continuous striving for excellence. It is a place where brilliant and scholarly minds, replete with knowledge of the past, meet keen and youthful spirits, always eager to rise to ever greater heights. It is a place for idealism, it is a place where the youth find their identities. It is no doubt also a place where they acquire knowledge of subjects and skills and competence of various sorts, but beyond this it is a place for acquiring vision and wisdom." Shri P. Shiv Shankar was delivering the Convocation Address at the 15th Annual Convocation of the Guru Nanak Dev University. Excerpts

Convocation

Our late Prime Minister, Shri Jawahar Lal Nehru who symbolised in many ways the hopes and aspirations of the nation had observed on an occasion that if all were well with the Universities, all would be well with the nation. If, therefore, we wish to ensure the fulfilment of our aspirations, we must ensure that all is well with our Universities. Certainly, no one will deny that there are many a shortcomings in the Universities and their systems. At the same time, it is important not to forget that our Universities have held aloft the torch of knowledge and maintained high traditions of teaching and research; they have recently added to it the new tradition of extension and social service. Whatever be the dimension of activity, the University is distinguished by its relentless and continuous striving for excellence. It is a place where brilliant and scholarly minds, replete with knowledge of the past, meet keen and youthful spirits, always eager to rise to ever greater heights. It is a place for idealism, it is a place where the youth find their identities. It is no doubt also a place where they acquire knowledge of subjects and skills and competence of various sorts, but beyond this it is a place for *acquiring vision and wisdom*. Our ancient teachers never thought of transmission of knowledge without transmission of wisdom. They sought this by imparting what is described as "sanskar", a concept which encompasses all that is mankind's common heritage. The Guru was not just a teacher; he was, in reality a friend, philosopher and guide. It was his responsibility to cultivate in disciples, committed to his charge, not only an understanding of the universe and the phenomena but an awareness of the richness of human personality and tastes.

These objectives were easier to attain in small institutions with dedicated Gurus and devoted disciples. But in today's context we need to have large institutions. Your University has for instance 76 colleges located in four districts. You are offering teaching and research facilities in as many as 20 Departments. You have a Regional Centre at Jalandhar. In a large and wide-spread institution we cannot under-estimate the difficulties of creating an atmosphere and of transmitting a tradition. Faced with such difficulties, it is easy enough to concentrate on the task of teaching and learning certain subjects and forget that the university is much more than that. Of course, it is important to improve the standards of teaching and learning in the area of subject matter and keep pace with ever growing knowledge, but it is equally important to develop the vision and wisdom.

Our traditional system of education depended mainly on oral transmission of knowledge and "*Sanskar*". The objective of that education was to produce men and women endowed with such minds and souls as could guide them in serving the cause of humanity. This education began at our homes, in our families. For a long time in our history the joint family was a major unit of social organisation. The joint family was a community of human relationships. What is important, however, was that the joint family reflected the most complex of human relationships in all their variations and diversities. The father of the family was also its *Guru* while the mother, too, played a strong and definitive role. It were they who told their children stories from the sacred books and narrated to them several heroic incidents and events. Though confined to the family, this education

helped develop in the young minds certain ethos and respect for values. Closely knit as the family was, it was easier for its members to absorb these values which helped them withstand external pressures and stresses. The cornerstone of this education was character-building. It may not have served all the purposes of development of the individual; but what it did had possibly no other substitute.

The advent of industrial economy brought about a complete transformation of the social systems all over the world. Economic prosperity became the main focus for growth and development. This, in turn, affected the life-style and patten of thinking of the people.

Economic independence of the individual acquired greater importance. It had an impact on human relationships, between individuals in the families, and in the society at large. It was inevitable that with these changes in life styles, there was also an erosion of the established values. Values and concerns that man had cherished for generations began to lose some of their relevance and meaning. The attitudes and behaviour patterns of the young people began to be shaped more by the external society than by family ties. The joint families have now broken up. Children no longer grow up in the warmth of the community of relationships. Even within the small families, increasing urbanisation and the emergence of the working parents, are depriving the children of the opportunity to grow up in the traditional mould of the Indian ethos. Can we afford to disinherit the future generations of the richness of our past ?

The relevan system of education would be determined by the demands of the social order for which the system is preparing its youth. Our system of education has, therefore, to be governed by the principles on which we are fashioning our own social order. Unless we know the goals towards which we are moving, we cannot decide what we should do, and how we should do it. Like individuals, societies also require a clear purpose to keep them stable in a world of bewildering changes. Fortunately for us, the outlines of social philosophy that should guide and govern all our institutions—social, educational, economic and political—are broadly provided in our constitution. It is to these principles that our system of education must be committed. It is the realisation of these constitutional objectives that should guide us in shaping and developing our destiny.

We are committed to a social order based on democratic principles. The basis of democracy is the belief in the inherent worth of the individual, in the dignity and value of human life. Democracy affirms that each individual is a unique phenomenon of life. Equality sustains our democratic life. If these principles and beliefs have to be nurtured and strengthened, our educational system should be able to guide each individual to realise his/her full potential; it should aim at the development of the individual and the discovery, training and utilisation of his/her special talents. A major constitutional objective is the establishment and development of a just society. Justice is a function of values. The affirmation of these values demands that we should desist from practising all forms of discrimination; we should ensure that all manner of exploitation is eliminated and the disabled, dispossessed and disadvantage are restored their dignity an honour. Principle of equal freedo and equal rights for all its citizen is the corner stone of our dem cratic society.

Education is the greate instrument of social emancipatio by which a democracy establishe maintains and protects the spir of equality among its member It is this spirit which is reflecte in the constitutional directives fo taking special measures to promot the educational and economi interests of the weaker section These objectives still remai unrealised. Indeed, this is one o the greatest weaknesses of ou education system. Despite th phenomenal expansion during th last 40 years, it has not yet full reached out to the people. Ther is a great measure of duality i our system. There are a goo many institutions which are enga ged in pursuit of excellence. I contrast, the performance of th vast majority of our institution involved in the education of th masses leaves so much to b desired. In consequence, pursu of excellence becomes in practic an exercise in perpetuating elitism We have to vastly improve th performance of our mass educa tion system. Another area o darkness in this context is women education. We have not even bee able to ensure that our wome who constitute 50% of our huma resources, can participate creat vely and meaningfully in th process of our social developmen We cannot let our potential huma resources go undiscovered an undeveloped.

Similarly, liberty is a maj foundation on which our democr tic society is built. Toleran reason, humanism are all valu that our liberal society cherish

deed, education itself is a libera-
g force. It should free us from
shackles of ignorance,
judice and unfounded belief.
we are incapable of achieving
od life, it is due to the faults in
being, and the darkness in us.
process of education is the
w conquering of this darkness.
lead us from darkness to light,
free us from every kind of
mination except that of reason,
he aim of education.

It is against this background
t we recently undertook a com-
ehensive review of our educa-
nal policies and programmes.
important outcome of this
iew is the attention that is now
ncentrated on some of the
akest areas of educational
velopment in the last 40 years.
have launched a major pro-
mme to ensure universalisation
elementary education by 1995.
assive though the programme
our endeavour is to achieve
s target. Simultaneously, we
ve launched a national pro-
mme for removal of illiteracy.
e National Literacy Mission,
ich is one of the six technology
ssions now being implemented,
ks to eradicate illiteracy among
adult population, especially
se in the 15-35 age group.
at I have said about the
rientation of our educational
tem, and the major objectives
t they seek to achieve, places
se two major national endeav-
s in proper perspective. Unless
deploy all the resources at our
mmand and implement these
grammes with a sense of dedi-
on and commitment, the social
er that we are hoping to
blish and seeking to achieve
uld still remain a mirage. For
se of us, who have been
vileged enough to be benefited
education, this is a challenge
an opportunity.

We have taken a momentous decision to lower the voting age. About 47 million young men and women in the age group of 18-21, for the first time in the history of our democracy, will become arbiters of their own political destiny. This participation in the political process also places a tremendous responsibility on them. It is not just a question of the youth adjusting themselves to the exigencies of the new situation, it is an opportunity to train our youth not merely to be citizens, but also to be individuals. It is also an opportunity to transform the youth; some of them might rise, above their types, to represent the society, and even provide leadership.

Before I conclude, I would also like to refer to a major dilemma of our times. This dilemma arises from two contradictory impulses : on the one hand, a jealous pride in Indian genius and tradition which are wholly distinct from those of the West; and, on the other, no less jealous a desire to profit by the example of the West. In an extreme form, this dilemma is manifested in the controversy between spirituality and materialism. Without getting into that larger controversy, I would confine my observations to the relevance of these contradictory impulses to the content and process of education. The aim of education can no longer be making the educated merely virtuous citizens. The economic content of social progress cannot be wished away. Our citizens must also become producers of wealth if the social objective of destributive justice has to acquire any meaning. This demands that our youth should be equipped with the skills and competence to become active participants in production processes and to increase their productivity. This is an imperative from which our education system cannot shy away. It is for the academic bodies and experts to determine how much of a curriculum should comprise these need-based, skill-oriented components, and how they should be integrated with the teaching-learning processes. Without such a component, in today's world the educational programmes will be devoid of much of their relevance and meaning. At the same time, we must ensure that we do not produce scientists without a conscience, and technicians without tastes. □

Higher Education For All ?

(*Continued from page 3*)

rationale that it seems easily convertible into a social and educational norm. If so, then higher education not only is and has been the privilege of the few, but of right ought to be.

Educational reforms in India can no longer afford to be adhoc. We need to build a learning society. In a milieu where it takes years for anything to move, the educational policy of 1986 is a commendable despatch; showing that India is ready for a change. The case for a change is however overwhelming; pressures are building up for a change but the direction of the change is uncertain, if not also unpredictable. □

CALENDAR OF EVENTS

Proposed Dates of the Event	Title	Objective	Name of the Organising Department	Name of the Organising Secretary/Officer to be Contacted
Oct. 13-15, 1989	National Symposium on Environmental Management Strategies for Pathogenesis in Parasitic Diseases	To discuss economic significance of parasitic diseases in fish, biological control of pathogens and environmental interactions, disease prediction hypothesis & management of transmission dynamics	Department of Zoology, University of Allahabad, Allahabad.	Dr. Sandeep K. Malhotra Convenor, Post-Box No. 2010, Parasitology Laboratory Department of Zoology University of Allahabad Allahabad.
Oct. 16-18, 1989	Fourth Annual National Convention of Indian Association of Physics Teachers (IAPT)	To discuss Physics Teaching at the Undergraduate level	Govt. Science College, Raipur (M.P.)	Shri M.G. Tarnekar, Convener C/o Department of Physics, Govt. Science College, Raipur-492010.
Oct. 20-22, 1989	National Symposium on Dynamism in Chemical Reaction	Proposed topics include Energetics, Dynamics and Reaction Kinetics; Catalysis; and Chemical Monitoring of Environment Pollutants	Atarra Postgraduate College, Atarra, Banda (U.P.)	Dr. R.K. Shukla Head, Department of Chemistry. Atarra P.G. College Atarra, Banda (U.P.) 210201
Oct. 27-28, 1989	All India Seminar on Construction Management.	Proposed topics include construction materials, construction techniques, Work site organisation, Safety Engg. and Role of Computer in Construction Management.	Civil Engineering Department, Thapar Institute of Engineering & Technology, Patiala.	Dr. C.B. Kukreja, Prof. & Coordinator, All India Seminar on Construction Management, Deptt. of Civil Engineering, Thapar Instt. of Engg. & Tech., Patiala-147001 (Punjab).
Dec. 4-7, 1989	International Conference of Engineering Software	To deliberate on the recent advances in the software development and associated computational methods for specific engineering applications.	Indian Institute of Technology, Delhi.	Prof. C.V. Ramakrishnan, Head, Deptt. of App. Mech. IIT, Delhi, Hauz Khas, New Delhi-110016.
Dec. 13-15, 1989	13th National Systems Conference—1989	To bring out the various systems methodologies as applied to Engineering, Industrial Economics, and social problems.	Department of Electrical Engineering, IIT, Kharagpur.	Prof. M.K. Ghosh, Department of Electrical Engineering, Indian Institute of Technology, Kharagpur-721302
Jan. 15-21, 1990	Short Term Course on Processing and Characterisation of Rubber and Rubber like materials.	To highlight recent advances in processing Rubber and Rubber like materials, their characterisation and that of their composites.	Rubber Technology Centre, IIT, Kharagpur	Dr. Golok B. Nando, Rubber Technology, Centre, IIT, Kharagpur-721302

IITTM and Tourism Education

The Indian Institute of Tourism & Travel Management (IITTM), an autonomous organisation under the Ministry of Tourism and Civil Aviation, Government of India, aims to : (i) coordinate and contribute to teaching in tourism at the Universities; (ii) foster training for research in tourism; (iii) conduct basic and applied research relevant to tourism and promote multi-disciplinary and inter-disciplinary activity; (iv) contribute to and assist with the organisation of Seminars and short in-service courses with aspects of tourism; (v) serve as a national clearing house for the dissemination of the research findings and development information relating to tourism; and (vi) provide consultancy and responses to relevant national and international actions and policy statements on tourism.

To achieve the above objectives various measures are being taken by this institute for the development of tourism education in the country. These include launching of specialised postgraduate level diploma and degree courses in the disciplines of tourism and travel management; developing of syllabus for the Master of Tourism Administration (MTA) courses; linkages with several international universities for faculty and curriculum exchanges ; and planning of a course for 'Training of Trainers' in March/April, 1990.

In order to assist the universities which are interested in standardising tourism courses and for training of their faculty in this discipline, the IITTM proposes to develop a network arrangement with the universities and academic institutions for extending to them the following benefits :

- Curriculum inputs including standardised syllabi for the Tourism and Travel Management PGPs duly recognised by the Ministry of Tourism, Government of India;
- Certificates/Diplomas/Degrees to be awarded under the network arrangement would carry the recognition of the Ministry of Tourism which would have a bearing on the future placement opportunities;
- Universities/Institutions joining the network arrangement would be invited to nominate 2-3 Faculty staff for the IITTM's 'Training of the Trainer' course scheduled in March/April, 1990, which would be conducted by an International Faculty of Trainers in collaboration with the World Tourism Organisation;
- A Consortium of Resources would be developed for sharing inputs relating to course and text material, research projects and library and documentation centres:
- The inputs obtained through IITTM's international linkages with George Washington and Hawaii Universities and Graduate School of Management, New York in USA; Universities of Surrey and Strethclyde in UK; and the Australian National Centre of Tourism in North Queensland would be shared with the member organisations;
- Services of trained teachers and research scholars in tourism discipline of foreign universities for short term placement in Indian universities to assist in launching tourism education courses may become available under the linkages referred to above;
- A Central Accreditition Council would be established to examine the textbooks and teaching materials in Tourism produced by the affiliated universities;
- IITTM have developed a unique state of the art system of training through its Video Lecture Series which would be shared with the network members ;
- Technological and equipment aid for setting up audio-video screening facilities, language and computer Labs being negotiated under the international bilateral funding programmes for the IITTM would also be shared with network members on first come first serve basis;
- Newsletters/Journals on Tourism received from international organisations like the World Tourism Organisation (WTO), Pacific Asia Travel Association (PATA) and UN ESCAP would be shared with the network members.

The IITTM also proposes to publish a national inventory of tourism courses being conducted by the various universities and their affiliated departments. Universities which are conducting programmes in tourism, travel and hotel management may forward the details of their courses, name and designations of their concerned Tourism Faculty members along with copies of their syllabus for inclusion in the national inventory. This information would be transmitted to international organisations like the World Tourism Organisation, Madrid, and the Pacific Asia Travel Association, San Francisco, for inclusion in the international inventory of Tourism Courses and Resource Persons being compiled by them for the purpose of organising exchange programmes and sharing of training facilities between the member countries.

The universities may also indicate their interest in joining the proposed network arrangement with the IITTM and the participation of their faculty members in the 'Training of the Trainer' course to be held in March, 1990, with the collaboration of the World Tourism Organisation, to the Director, Indian Institute of Tourism & Travel Management, Arunachal Building, (11th Floor), 19, Barakhamba Road, New Delhi-110001.

Taxation Policy, Profession and the Universities

A National Seminar on "Taxation Policy & Coordination between the Profession and Universities" was held on 12th August, 1989 at Kanpur. Jointly organised by the Institute of Chartered Accountants of India (ICAI) and the Kanpur University, the seminar was inaugurated by Mr. Justice S.D. Agarwala of Allahabad High Court. Drawing on the various constitutional provisions Justice Agarwala opined that taxation policy should bring improvement in economic system and called upon Chartered Accountants to look to the benefit of the poorest of the poor. He suggested setting up of employment bureaus, establishment of research bodies, setting up Legal Aid Cell for Tax matters and computerised system for tax information.

Dr. B.N. Asthana, Vice-Chancellor, in his key-note address, highlighted the role of Universities and the Institute in moulding the tax policy He felt that direct and indirect taxes need to be examined in the light of progressiveness and ethics. He deplored the indiscriminate resort to taxes on the pretext of acceleration of economic growth.

Presiding over the seminar Shri A.H. Dalal, Vice-President of the I.C.A.I. explained in detail the activities of the Institute and the most recent changes in its working. He advocated legitimate tax planning and broad-based researches in tax policy and called for simplification of tax laws.

To forge and intensify close coordination between the Institute and the University, suggestions were made for inter-connection and inter-relationships in terms of courses, syllabi, exchange of faculty, practical training, etc.

The seminar was attended by a large number of C.As, Academicians, Tax Executives, Professors from other Universities at which about 30 papers were presented in the two technical sessions.

Maulana Azad Education Foundation

The Central Wakf Council has set up Maulana Azad Education Foundation to promote and accelerate the pace of education among the Muslims. This was announced by the Minister of State for Welfare, Mrs Rajendra Kumari Bajpai, who is also the chairperson of the Council, at the 29th meeting of the Central Wakf Council held in New Delhi recently.

To achieve its objectives in the context of the national education policy, the Foundation would promote and establish educational institutions and provide financial aid and consultancy services. It would give guidance to students on educational and vocational choices and financial assistance to the needy and meritorious.

Special assistance would be provided for technical and vocational education to youth, especially women, coaching of candidates for competitive examinations and entrance to professional colleges. It would also help in the establishment of care homes for women in distress and train them in different vocations.

Refresher Course in Social Work

The Academic Staff College of the Andhra University recently organised a refresher course in Social Work. Prof. K.V. Ramana, Vice-Chancellor, in his valedictory address advised the participants who are working in the affiliated colleges to translate the theoretical and practical approaches to social development into action programmes at the grassroot level by involving students and other volunteers. He mentioned that there were a number of problems today in our society like environment degradation, child development, slum improvement and such other areas where the teachers of social work could actively participate and make use of the knowledge that they have obtained during the training programme. He said that the teachers of social work unlike other social disciplines could do social analysis, understand the problems of people and could develop action oriented projects. He further advised the participants to take up pilot research projects at the college level to get experience in the field.

INSA Awards Announced

The Indian National Science Academy (INSA) has announced Srinivasa Ramanujan Medal for 1988, and various other Awards/Medals/Endowed Medals/Academy Lecture for 1989.

Recipients of the awards are :

- The Srinivasa Ramanujan Medal 1988 has been awarded to Professor M.S. Narasimhan, Senior Professor of Mathematics, Tata Institute of Fundamental Research, Bombay, for his significant contributions in mathematics, especially differential and algebraic geometry, mathematical physics and differential equations.

- Satyendranath Bose Medal to Professor Chanchal Kumar Majumdar, Director, S.N. Bose National Centre for Basic Sciences, Calcutta for his original and outstanding contributions in areas of positron annihilation in metals, magnetions in insulating Heisenberg Hameltonian and statistical mechanics of phase transitions and disordered solids.

- Jagdish Chandra Bose Medal to Professor N. Appaji Rao, Department of Biochemistry, Indian Institute of Science, Bangalore for his outstanding contributions in elucidating the regulatory aspects of several important enzyme systems from a variety of biological sources.

- Darashaw Nosherwanji Wadia Medal to Professor Saurindra Nath Sen, Department of Geology, Calcutta University, Calcutta for his works on structural and tectonic interpretation of the Precambrian rocks of Rajasthan.

- Syed Hussain Zaheer Medal to Professor Rajinder Kumar, Department of Chemical Engineering, Indian Institute of Science, Bangalore for his pioneering contributions to the analysis of multi-phase systems and an innovative design of a very large commercial fluidised bed reactor.

- Golden Jubilee Commemoration Medal—Chemical Sciences to Professor Goverdhan Mehta, Dean, School of Chemistry, University of Hyderabad, Hyderabad for his outstanding contribution in synthetic organic chemistry particularly in the fields of strained polycyclic systems and complex bioactive terpenoids having challenging molecular frameworks by using elegant methodologies.

- Golden Jubilee Commemoration Medal—Biological Sciences to Professor John Barnabas, Deputy Director and Head, Division of Biochemical Sciences, National Chemical Laboratory, Pune for outstanding contributions to our understanding of molecular aspects of evolution.

- INSA-Vainu Bappu Memorial Award to Professor Geoffrey Burbidge, Professor of Physics, University of California, San Diego, USA, for distinguished and pioneering contribution to understanding of stellar nucleosynthesis.

- Bashambar Nath Chopra Lecture to Dr. Pushpa Mittra Bhargava, Director, Centre for Cellular and Molecular Biology, Hyderabad for his work on regulation of cell growth and for characterization of seminal plasma and its role in reproduction.

Prof. Muller-Kirsten Lectures

Prof. Dr. H.J.W. Muller-Kirsten of the Department of Physics at Kaiserslautern University, West Germany proposes to visit IIT-Madras during September 1989 to deliver a set of lectures on the following topics :

(1) Construction of some New Model Theories with Stable or Metastable Pseudoparticle Solutions.
(2) Quantum Tunnelling, Metastability and Large-Order Behaviour of Perturbation Theory.
(3) Direct Quantization of a Supersymmetric Field Theory.

Prof. Muller-Kristen will also discuss several other aspects of Methematics and Theoretical Physics with the faculty in IIT-Madras, Ramanujan Institute and Matscience.

News from Agril. Varsities

Workshop on Spices

The X Workshop of All India Co-ordinated Research Project on Spices was held during August 22-24, 1989 at the Tamil Nadu Agricultural University (TNAU), Coimbatore. One hundred and thirty delegates attended the Workshop and deliberated on the progress of research under the Co-ordinated Project, conducted at 15 Research Centres under nine Agricultural Universities and an ICAR Institute.

Dr. S Jayaraj, Vice Chancellor, TNAU, inaugurated the Workshop and also presided over the Plenary Session He advised the participants to develop future strategies for spices research with special reference to the Co-ordinated network.

The delegates were taken for a field visit to Turmeric growing areas and were impressed by the high technology impact on cultivation of Turmeric. Mr. T.M. Varadarajan,

an agriculture graduate and a farmer, had an effective interaction about his experience on the cultivation of Turmeric. He expressed concern on the "high cost input" for growing of spice crops and requested the delegates to give a thought to this problem.

The Workshop expressed concern over pepper variety Panniyur-1; which has developed certain problems due to adverse climatic conditions. Since the pepper growers have been demanding a replacement, the Workshop recommended the release of four improved varieties of pepper, which have advantages over the existing Panniyur-1, Karimunda, etc.

In Turmeric, three high yielding varieties have been recommended for cultivation in Kerala and Andhra Pradesh. For Andhra Pradesh, two varieties of Coriander have been recommended to suit early and medium duration of maturities. Agro-techniques for optimum spacing for Turmeric in Kerala and fertilizer dosage for Fennel in Rajasthan were also recommended.

The Workshop strongly recommended the necessity for import of exotic germplasm from Mediterranean tracts and West Europe to break the yield barrier in grain spices, namely Cumin, Coriander, Fennel and Fenugreek. In the case of Black Pepper and Cardamom, exhaustive joint surveys have also been suggested to be taken up as a priority item.

A new look has been advocated to identify suitable control measures for the wilt and blight diseases of Cumin, application of bio-fertilizers to black pepper and cardamom, integrated plant protection measures for the control of Phytophthora rot disease of black pepper, Rhizome rot of turmeric and ginger, besides use of biotechnology for crop improvement, multiplication and developing resistant lines.

The Workshop also expressed concern about the production and distribution of adequate quantities of elite planting material and suggested to take up serious and time bound action plan to improve the productivity of the spice crops by adopting modern techniques.

Crop Modelling in Agriculture

Dr. Penning DeVries, the crop production Ecologist of International Rice Research Institute, Manila recently visited the Tamil Nadu Agricultural University (TNAU), Coimbatore. In his address to the TNAU scientists he advocated systematic crop modelling in agriculture. Hailing the emergence of explanatory models in various fields, he said that crop productivity was affected by widely varying conditions and as in human beings, the physiological age of crops affected their responses. Through slide commentary, he explained the applications of crop modelling basing the wheat crop as example.

Dr. DeVries called upon the TNAU scientists to analyse the maximum potentialities of major crops under 'no problem no constraint' situation. With the generated research base data, he has shown the maximum grain yield potentialities in transplanted rice based on transplanting dates. A pictorial explanation of an ideal plant type was also displayed by him.

Dr. S. Jayaraj, Vice-Chancellor, TNAU, said that through crop modelling, the management of agricultural research had acquired new meaning in the present day context. He emphasised anticipatory research in agriculture to meet different weather probabilities, locally and globally and said that it should be initiated and computer simulation possibilities prepared.

Expressing the satisfaction on the successful crop modelling in Holland on Potato late blight and in UK on wheat powdery mildew wherein the farmers directly made use of the model results, Dr. Jayaraj wanted our clientele system to take advantage of the predictions of crop models.

Rainfall prediction and crop weather modelling would help the farming community to have preparedness on crop planning with the choice of crops and varieties. This area has received greater attention by TNAU scientists. Dr. Jayaraj also emphasised the modelling work in forestry, specifically nursery management and biomass production.

News from Abroad

TWAS History of Science Prize 1989

In 1987 the Third World Academy of Sciences (TWAS) instituted a Prize for the best research essay highlighting the work of a scientist from a country of the Third World whose achievements had not been previously recognized. The first of these prizes was awarded in October 1988, for an essay on some remarkable astronomical tables compiled by a computational genius Shams-al-Din al-Khalili, and used in Damascus from the fourteenth century to the nineteenth.

As a result of the enthusiastic response to the announcement of the first prize and the success of

that first competition, the Third World Academy of Sciences has invited submission of essays to be considered for a Second History of Science Prize to be awarded in 1990.

The regulations, governing the Prize are as follows :

- The research essay should summarize the major achievements of a Third World Scientist prior to the 20th century, whose work has not been hitherto clearly recognized. It should indicate the impact of the scientist's contributions on his/her community and, where relevant, establish their influence on modern scientific thought.
- Essays on previously unstudied works by scholars who are already known to the modern literature will also be considered.
- Essay on themes in the history of science which are not associated with one particular scientist or individual will also be considered.
- Essays must be written in the English language.
- The length of the essay should preferably be between about 20,000 and 50,000 words.

Further details can be had from the Executive Secretary, Third World Academy of Sciences, International Centre for Theoretical Physics, 34100 Trieste (Italy) P.O.B. 586, Miramare, Strada Costiera-11.

News from UGC

INSAT 1-B Programme of UGC

Between 19th September to 25th September, 1989 the following schedule of telecast on higher education through INSAT 1-B under the auspices of the University Grants Commission will be observed. The programme is of one hour duration every day from 12.45 p.m. to 1.45 p.m. and will be available on the TV Network throughout the country.

19-9-89

"The Basics : Effective Writing Skills"
"Ayurveda Series-II : Herbal Wealth of Gujarat"

20-9-89

"Energy and Architecture"
"Microbiology of Milk-I"

21-9-89

"Rectifiers"
"Voyage en Gaule"
"Present Continous Tense"

22.9.89

"Story of Our Universe-VI"
"Role of Politics in Society"
"A Delicate Balance"

23.9.89

"Home of Porcelain in South Chine"
"Alcatraz"
"Music of North India : Bhimsen Joshi"

24.9.89

No Telecast

25.9.89

"Lasers-I"
"Land Management"
"A New Way of Controlling Insects"

Autonomous Departments

Under a scheme evolved by the University Grants Commission, selected departments, schools and centres in the university system can be granted academic autonomy as well as the necessary administrative and financial autonomy needed for achieving the objectives of the academic autonomy.

The University departments recognised as Centres of Advanced Studies (CAS) and those receiving special assistance from the UGC under Departments of Special Assistance (DSA), Strengthening of Infrastructure in Science and Technology (COSIST), Areas Studies, Media Centres, etc. may be granted autonomy by the concerned universities in the first instance. Simultaneously steps will be initiated to confer autonomous status to other departments also. The autonomy will be granted on a five-year term basis which can be revoked in case there is convincing evidence about the misuse of the autonomous status.

Each autonomous departments will have a Departmental Council with varying composition, with a specific term of membership. The Department will also constitute an appropriate mechanism to evaluate its own performance. Each autonomous department will, keeping in view the general policy of the university, frame regulations regarding admissions, preparation of syllabi, methodology of evaluation and examination, identify thrust areas for research and formulate necessary financial and administrative arrangements including processing of cases for recruitment of faculty.

The UGC has been emphasising the need to decentralise authority and confer autonomy to the university departments with a view to create an elastic and dynamic system for promotion of innovation in teaching and research, and efficient functioning of centres of academic excellence. The National Policy on Education (1986) too underlined the imperatives of autonomous university departments.

REFERENCE AND RESEARCH TOOLS

BIBLIOGRAPHY OF DOCTORAL DISSERTATIONS

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The Bibliography is classified by subjects and covers all the disciplines in which a Doctoral Degree is awarded by the Indian Universities. Each entry gives complete Bibliographical details, viz. Name of the Research Scholar, Title of the Thesis, University/Institute where the research was conducted, years of registration and award of degrees, availability note—where a thesis is available in the University Library/Department concerned/University Office and the Name and complete address of the Guide/Supervisor.

Comprehensive and exhaustive as the bibliography is not only reports the research being conducted at the university centres, but also includes research work done at the institutions of national importance, like the IITs, Institutions Deemed to be Universities, like the Indian School of Mines, CSIR Laboratories as also the Research Establishments connected with ICAR and ICMR.

The Bibliography is indeed a measure of the research output of the country.

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AIU Library

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month', while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research Scholars and students of education are welcome to use these resources. The Library is open from 9.00 a.m. to 5.30 p.m. Monday through Friday. Access can also be had through inter library loan for which requisition must be made through your Librarian.

RESEARCH IN PROGRESS

A List of Research Scholars Registered for Doctoral Degrees of Indian Universities

SOCIAL SCIENCES

Library & Information Science

1. Konnur, P.V. *Public relations in libraries: An analytical study of Karnataka Public Library System* Karnatak. Dr. S.L. Sangam, Reader, Department of Library and Information Science, Karnatak University, Dharwad.

Psychology

1. Joseph, Fr. J. *An empirical study of the personality make up of Kerala fishermen.* Kerala, Dr. R. Sreedevi Ammal, T.C. 37/2229-1, West Fort, Trivandrum.

2. Sarup, Anju. *A study of Machiaellianism among university students in relation to personality, hostility, trust and motives.* Panjab. Dr. Anuradha Bhandari, Department of Psychology, Panjab University, Chandigarh.

3. Varghese, Roshan Maria. *Psychological impact of television on students.* Kerala. Dr. H. Sam Samanda Raj, Reader, Department of Psychology, University of Kerala, Kariavattom.

Sociology

1. Vasave, P.M. *Role of development functionaries as change agents in rural areas of Ahmednagar District.* Shivaji. Dr. A.D. Madgulkar, Head, Department of Social Work, Chh. Shahu Central Institute of Business and Research, Kolhapur.

Political Science

1. Mini, G. *Role of voluntary organisations in mass conscientisations: A case study of Kerala Seatra Sahitya Parishad.* Kerala. Dr. K. Raman Pillai, Head, Department of Politics, University of Kerala, Kariavattom.

2. Prabhash, J. *Policy reservation and social mobility among scheduled castes in Kerala.* Kerala. Dr. K. Raman Pillai, Head, Department of Politics, Universiiy of Kerala, Kariavattom.

3. Prem Kumar, S.K. *Electoral performance of CPI(M) in Kerala: A study of strategy tactics and achievements.* Kerala. Dr. D Jayadevadas, Reader, Institute of Correspondence Courses, University of Kerala, Kariavattom.

Education

1. Asthana, Bhawana. *The influence of music-education on personality.* Agra Dr. (Smt.) Shruti Kumar, Lecturer, R.B.S. College, Agra.

2. Gupta, S.K. *Mental imagery and abbreviational processes in associative memory.* Devi Ahilya. Dr. U.S. Choudhary, School of Education, Devi Ahilya Vishwavidyalaya, Indore.

3. Navlakha, Nirmala C. *Effect of synectics and gaming upon self-concept, creativity and achievement of school learners.* Devi Ahilya. Dr. U.S. Choudhary, School of Education, Devi Ahilya Vishwavidyalaya, Indore.

Commerce

1. Agrawal, Seema. *Indore Jile mein sahkari sakh samitiyon dwara krishi sakh: Ek mulyankan.* Devi Ahilya. Dr. R.P.

Baldawa, Department of Commerce, Shri Vaishnav College of Commerce, Indore.

2. Bansal, Anoopchand. *Madhya Pradesh ke pichhre Jilon ke arthik vikas main audyogikaran ka yogdan : Dhar Jile ke vishesh sandarbh mein.* Devi Ahilya. Dr. J.K. Mehta, Principal, P.M.B. Gujarati Commerce College, Indore.

3. Deshpande, R.G. *A study of organisational aspects and City Bus Passenger Services Municipal Transport.* Shivaji. Dr. C.S. Shreshthi, Chh. Shahu Central Institute of Business Education and Research, Kolhapur.

4. Godbole, Chhaya. *Madhya Pradesh ke rashtriyakrit adhikoshon kee sewa karyakshamta ka vishleshanatmak adhikoshon kee sewa karyakshamta ka vishleshanatmak adhyayan, 1980 se 1990.* Devi Ahilya. Dr. J.K. Mehta, Principal, P.M.B. Gujarati Commerce College, Indore.

5. Gujrathi, Ajay. *Madhya Pradesh ke vikas mein laghu udyog kee bhumika : Ek arthik vishleshan.* Devi Ahilya. Dr. S.R. Sondhi, Department of Commerce, Shri Vaishnav College of Commerce, Indore.

6. Johri, Sanjay. *Madhya Pradesh mein rashtriyakrit bus sewa kee karyapranali ka arthik adhyayan.* Devi Ahilya. Dr. J L. Bhandari, Lecturer, Department of Commerce, Govt. Arts and Commerce College, Indore.

7. Kawthekar, S.V. *Jeewan Bima vyavsaya ka vipnan prabandh : Indore Mandal ke vishesh sandarbh mein.* Devi Ahilya. Dr. B.S. Bhandari, Department of Commerce, Govt. Arts and Commerce College, Indore.

8. Lal, Abha. *Madhya Pradesh kee niryatak ekayion kee sambhavnayen : Indore Sambhag ke vishesh sandarbh meln.* Devi Ahilya. Dr. B.R. Mishra, Asstt. Prof., Department of Commerce, Govt. Arts and Commerce College, Indore.

9. Neema, Umesh Kumar. *The profitability trends in private sector bank in India : A case study of the Bank of Rajasthan Ltd.* Devi Ahilya. Dr. K.G. Johri, Prof. and Head, Department of Commerce, Government Arts and Commerce College, Indore.

10. Parel, Vipul. *Madhya Pradesh mein hotel udyog : Indore Jile ke vishesh sandarbh mein.* Devi Ahilya. Dr. J.K. Mehta, Principal, Gujarati Commerce College, Indore.

11. Purohit, Deonarayan. *Madhya Pradesh mein soyabeen tel ka vipnan.* Devi Ahilya. Dr. P.L. Rathore. Asstt. Prof., Department of Commerce, Indore Christian College, Indore.

12. Rathi, Veena B. *Indore Jile kee gram panchayaton ka vittiya prashasan.* Devi Ahilya. Dr. R.P. Baldawa, Department of Commerce, Vaishnav College of Commerce, Indore.

13. Vadavi, S.V. *Role of regional rural banks in poverty alleviation of scheduled castes and scheduled tribes in Karnataka.* Shivaji. Dr. C.S. Shrishettl, Chh. Shahu Central Institute of Business Education and Research, Kolhapur.

HUMANITIES

Language & Literature

English

1. Kulkarni, R.G. *The role of women in Eudora Welty's short stories.* Shivajl. Dr. P.R. Khar, Department of English, Shivaji University, Kolhapur.

2. Kurup, Meera. *Nirad C. Chaudhari's attitude to Indian life : An assessment.* Kerala. Dr. V. Syama, Prof., Department of English, All Saints College, Trivandrum.

3. Parkhi, A.S. *A critical assessment of George Orwell's non-fictional writings and speeches.* Shivajl. Dr. P.B. Patil, Department of English, Shivajl University, Kolhapur.

Hindi

1. Panjabi, R.A. *Shrimati Dr. Kanchanlata Sabharwal : Vyaktitva evam sahityik krititva ka anusheelan.* Shivaji. Dr. P.P. Pathak, Head, Department of Hindi, D.B.F. Dayanand College, Solapur.

2. Sujatha, M. *Humanitarianism in new poetry.* Kerala: Dr. V.V. Viswam, II Gr. Prof., Department of Hindi, College for Women, Trivandrum.

Marathi

1. Kulkarni, V.G. *Vivek Sindhucha Vivechak abhyas va uttarkalin granthavaril prabhav.* Shivaji. Dr. D.V. Kulkarni, Smt. M.G. Kanya Mahavidyalaya, Sangli.

Malayalam

1. Gopalakrishnan Nair, V. *Science communication in Malayalam : Historical and thematic study.* Kerala. Dr. K. Ramachandran Nair, Department of Malayalam, University of Kerala, Kariavattom.

2. Nair, Sobha B. *The relation between the musical and literary aspects of Thullal works : A study.* Kerala. Dr. V.S. Sharma, Department of Malayalam, University of Kerala, Kariavattom.

3. Savithri Amma, K. *Human relationship in K. Surendran's novels.* Kerala. Dr. P. Ramachandra Pillai, Prof. (Retd), Department of Malayalam, University of Kerala, Kariavattom.

4. Unnikrishna Pillai, J. *History of literature in Malayalam: A study.* Kerala. Dr. P.K. Sumathykutty, O.R.I. and MSS, Library, Kariavattom.

History

1. Kashid, S.M. *Growth of Parliamentary control over the East India Company and its administration in India.* Shivaji. Dr. B.R. Kamble, Head, Department of History, Shivaji University, Kolhapur.

THESES OF THE MONTH

A List of Doctoral Theses Accepted by Indian Universities

SOCIAL SCIENCES

Psychology

1. Bhaskar, Sarita. *Investigation into relation between job stress and personality factors among police officers and constables.* Delhi.

2. Mahapatra, Anita. *A study of creativity in relation to scholastic achievement, mental ability, frustration and personality among selected school students.* Delhi.

3. Pahwa, Ameeta. *Locus of interference in a stroop variant.* Delhi

4. Vijayakumar, C. *A study of the hosiery enterpreneurs at Tirupur, Tamilnadu.* Kerala. Dr. P.V. Veera Raghavan, Deputy Director and Head, Department of Human Relations The South India Textila Research Association, Coimbatore.

Sociology

1. Chaudhary, Namita. *Urbanization in North Bengal in the post-independence period* NBU.

2. Lakshmamma, T. *Pregnancy and responsible parenthood.* Venkateswara. Prof. P.B. Jorapur, Department of Polulation Studies, Sri Venkateswara University College, Tirupati.

3. Raychaudhury, Pareschandra. *Alcoholism and family disorganisation among the port and dock workers of Calcutta Port, Class-IV.* Calcutta.

4. Sobhavathamma, I. *A study of educated working women in Chittoor District.* Venkateswara. Prof. A.S.N. Murthy, Department of Sociology, Sri Venkateswara University College, Tirupati.

Political Science

1. Chattopadhyay, Tarapada. *Gandhi and the Indian working class.* Calcutta.

2. Khan, P. Hussain. *Scheduled Castes's political participation : A case study of Khammam District in Andhra Pradesh.* Kakatiya. Dr. B Venkateshwarlu, Reader, Department of Political Science, Kakatiya University, Warangal.

3. Prasad, Sudha. *Socio-economic and political ideas of Ram Manohar Lohia.* Delhi.

4. Verma, Mamta. *1977 evam 1980 ke chunavon ka tulnatmak vishleshan : Vindhya kshetra ke vishesh sandarbh mein.* Awadhesh. Dr. (Smt.) Bahi Mukherji, Principal, Govt. Girls College, Rewa.

5. Yashmin Ahmed. *Social and economic background of political elites in Assam.* Delhi.

Economics

1. Abounoori, Abbas Ali. *Agricultural development in drought prone areas of Iran : An interdisciplinary approach.* Venkateswara. Prof. D. Narasimha Reddy, Department of Economics, University of Hyderabad, Hyderabad.

2. Anna, V. *Women entrepreneurship in the industrial manufacturing sector of Kerala.* CUST. Dr N. Chandrasekhara Pillai, Reader, School of Management Studies, Cochin University of Science and Technology, Cochin.

3. Deshmukh, Dilip Awachitrao. *Impact of Integrated Rural Development Programme (IRDP) on rural development in Parbhani District.* Marathwada. Dr. K.D. Rajmane, Assoc Dean and Principal, College of Agriculture, Latur.

4. Ghanshyam Singh. *Communication system for human resource development of farmers in Haryana.* HAU.

5. Jacob, Kizhakapothil Varki. *A comparative study of the steel industry of Japan and the United States of America.* Karnatak. Dr. C.B. Tigadi, Director (Retd), Management Studies, Karnatak University, Dharwad.

6. Khanna, Perminder. *Energy crisis : Its impact upon the balance of payments and the economy of India.* Panjab.

7. Lizy, M A. *Federal financial relations with special reference to Kerala.* CUST. Dr. K.C. Sankaranarayanan, Prof and Head, Department of Applied Economics, Cochin University of Science and Technology, Cochin.

8. Mishra, Prabha. *Madhya Pradesh mein krishi upaj ka sehkari vipanan.* HS Gour. Dr. P.K. Patankar, Reader, Department of Economics, Dr. Harisingh Gour Vishwavidyalaya, Sagar.

9. Panth, Prabha. *An integrated input-output model of the environment.* Osmania.

10. Satyanarayana Reddy, K. *Mathematical approach to some problems in economics : Supply response and resource use efficiency in agriculture in Andhra Pradesh.* Venkateswara. Dr. D. Bathaiah, Department of Econometrics, Sri Venkateswara University College, Tirupati.

11. Thakur, Balbeer Singh. *Analysis of socio-economic dimensions of technological change in agriculture : A micro level study of farmers' adoption behaviour in six villages of Andhra Pradesh,* Kakatiya. Dr. Mohammad Iqbal Ali, Lecturer, Department of Economics, Kakatiya University, Warangal.

13. Tiwari, Sushil Kumar. *Sagar Jile mein krishi upaj ka vipanan.* HS Gour. Dr. P.K. Patankar, Reader, Department of Economics, Dr. Harisingh Gour Vishwavidyalaya, Sagar.

Law

1. Karki, Bharat Bahadur. *Legal regulation of multinational companies in India and Nepal : Some problems and prospects.* Delhi.

2. Rishipal Singh. *Legal protection against double jeopardy in India.* Delhi.

3. Surender Singh. *Intra-familial violence and the law.* Delhi.

Public Administration

1. Rattan Lal. *Administration of co-operative credit in Himachal Pradesh.* Panjab.

Commerce

1. Devasurappa, L. *A study of silk fabrics marketing system in Bangalore.* Bangalore. Dr. O.R. Krishnaswamy, Department of Commerce and Management, Bangalore University, Bangalore.

2. Gupta, Jagdish Lal. *Inventory valuation policy and practices in selected Indian industries.* Delhi.

3. Himachalam, D. *A performance appraisal of the working of consumer cooperatives in Chittoor District.* Venkateswara. Prof. N. Kamaraju Pantulu, Department of Commerce, Sri Venkateswara University College, Tirupati.

4. Jain, Suresh Chandra. *Sooti vastra udyog ka lagat paksha : Indore Malwa United Mill ke sandarbh mein, 1979-80 se 1986-87 tak.* Devi Ahilya. Prof. L.D. Gokhale, Vasudev Nagar, Indore.

5. Mukhopadhyay, Bhabanisankar. *The management of fund by the non-bank financial intermediatries : Selected case study.* Calcutta.

6. Narayanaswami, B. *Operational efficiency analysis of transport industry through costing techniques : Case study of A.P.S.R.T.C.* Venkateswara.

7. Sharma, Jai Prakash. *Problems and prospects of sports goods industry in India.* Delhi.

8. Swarajya Lakshmi, C. *Problems of working women in the organised industrial sector in Chittoor District.* Venkates-

wara. Prof. N. Kamaraju Panthulu, Department of Commerce, Sri Vankateswara University College, Tirupati.

9. Talvania, R.M. *A study of the important aspects of marketing of cotton in Saurashtra with special reference to Surendranagar District.* Saurashtra. Dr. J.M. Mehta, Department of Commerce, Saurashtra University, Rajkot.

Education

1. Appanu Nambiar. M.P. *A comparative study of educational performance of secondary school children of educationally forward and backward areas of Kerala.* Calicut. Dr. A. Sukumaran Nair, Pro-Vice Chancellor, University of Kerala, Trivandrum.

2. Darchingpuil. *A study of science achievement, attitude towards science and problem-solving ability among secondary school students in Aizawl.* NEHU. Dr. M.A. Sudhir, Arunachal University, Itanagar.

3. Dayakara Reddy, V. *A study of moral judgement in relation to intelligence, personality and other variables.* Venkateswara. Prof. R. Srinivasa Rao, Department of Education, Sri Venkateswara University College, Tirupati.

4. Deka, Birendra. *Growth and development of higher education in Kamrup District since independence and its impact on society.* Gauhati. Dr. (Mrs.) L. Das, Prof. Department of Education, Gauhati University, Guwahati.

5. Dube, Archana. *Effectiveness of a training strategy for developing feedback giving and feedback receiving competence in relation to the selected organismic variables of student teachers.* Devi Ahilya. Dr. B.K. Passi, Head, Department of Education, Devi Ahilya Vishwavidyalaya, Indore.

6. Liankhuma, J. *A study of the development of women's education in Mizoram.* NEHU. Dr. (Mrs.) K S. Lyngdoh, Department of Education, North Eastern Hill University, Shillong.

7. Majumdar, Srilekha. *Organisational effectiveness and leadership styles of secondary school principals.* IIT Delhi. Dr. (Mrs) Amulya Khurana, Department of Humanities and Social Sciences, Indian Institute of Technology, New Delhi.

8. Mellitt, Antony Babu. *History of teacher education in Kerala State, 1956-1976.* Kerala. Dr. R. Sukumaran Nair, Director of B.Ed. Programme, B.Ed Sessional Programme Unit, Department of Education, University of Calicut, Calicut.

9. Narsimulu, G. *Adult education for tribal community.* Osmania.

10. Shashi Kala. *Relationship of selected psychological variables with attitude towards teaching of traditional and model school teachers.* Panjab.

11. Williams, Flossie. *A critical study of the administration of education in special schools for the blind and deaf in Karnataka State.* Bangalore. Prof. S.R. Rohidekar, 257/9, 52nd Cross IV Block, Rajajinagar, Bangalore.

Management

1. Banota, Kanwal Dev. *Primary health care monitoring and evaluation system : An integrated data management model in Indian environment.* IIT Delhi. Prof. Prithpal Singh, Centre for Management Studies, Indian Institute of Technology, New Delhi.

2. Chauhan, Poonam S. *Psychosocial factors and managerial effectiveness : A study of middle level managers of public and private sector organizations.* IIT Delhi. Prof. (Mrs) Purnima Mathur, Department of Humanities and Social Sciences, Indian Institute of Technology, New Delhi.

3. Gangadharan Nair, R. *Management of higher educational institutions in Kerala.* CUST. Dr. C.M. George, Prof., School of Management Studies, Cochin University of Science and Technology, Cochin.

EDUCATION NEWS INDEX

A List of Select Articles and Editorials on Education from Newspapers received in the AIU Library during August, 1989.

EDUCATIONAL PHILOSOPHY

Asfa Aii, Aruna. Learning in the university of life. *The Hindustan Times.* 15.8 89.

Gurumurthy, B. Steady erosion of values. *The Hindu* 8.8.89.

Inderpal Singh. Education and dharma. *The Tribune* 13.8.89.

EDUCATIONAL PSYCHOLOGY

Burstall. Clare. Father of IQ stands vindicated. (Sir Cyril Burt). *National Herald* 26.8.89.

EDUCATIONAL SOCIOLOGY

Sengupta, M. School-community partnership. *The Hindu* 15.8.89.

Smith, Daryl G. and Bergmann, Barbara B. Women in higher education in the US. *Amrita Bazar Patrika* 8.8.89.

EDUCATIONAL POLICY & PLANNING

Aggrawal, J.C. and Chowdhry, N.K. Evaluating NPE. *The Hindu* 15 8 89.

Chopra, Suneet. Education : Expansion or elitism ? *Patriot* 15.8.89.

Mitra, Ashok. Education and development : Towards the 21st century. *The Telegraph* 5 8 89.

A NEWER POLICY (*Editorial*) *The Tribune* 13.8.89.

RAPIDLY SPREADING EDUCATION (*Editorial*) *The Statesman* 15.8.89.

EDUCATIONAL ADMINISTRATION

Amrik Singh. What's wrong with Delhi University ? *The Hindustan Times* 30.8.89.

Datta, Amlan. The dilemma of higher education. *The Telegraph* 18 8 89.

GENERALS IN THE CAMPUS. (*Editorial*) *The Tribune* 12.8.89.

Krishan Gopal. Of principals and principles. *The Tribune* 6.8 89.

SHORING UP UNIVERSITY AUTONOMY (*Editorial*) *The Hindu* 19.8.89.

Suryanarayana M Hurdles in higher education. *Deccan Chronicle* 10.8.89.

TAMPERING WITH THE FUTURE OF STUDENTS (*Editorial*) *The Hindu* 5.8.89.

EDUCATION AND POLITICS

Sharma, Ajit Kumar. Is central university a first priority ? *The Assam Tribune* 2 8.89.

CURRICULUM

Bose, Anima. Why not peace studies courses ? *National Herald* 7 8 89.

Usmani, Shaheen. Missing link in curriculum. *The Hindu* 1 8.89.

LANGUAGE & LANGUAGE POLICY

STUDY OF SANSKRIT (*Editorial*) *Deccan Herald* 26.8 89.

SCIENCE EDUCATION

Paintal, A S. Evaluation of work by scientists-I. *The Tribune* 27 8 89.

Pravin Kumar. Faking and fudging to make startling discoveries *The Times of India* 5.8 89.

VOCATIONAL EDUCATION

Bashiruddin, S. How to choose your career ? *Deccan Chronicle* 2 8 89.

FARM GRADUATES (*Editorial*) *The Indian Nation* 19 8.89

IMA FEARS, (*Editorial*) *The Hindustan Times* 7.8.89.

Kawatra, H.A. Technical education in U.P. *Indian Expess* 31 8.89.

Srinivasan, A.V. Management : A remedial course. *The Economic Times* 28 8.89.

DISTANCE EDUCATION

IGNOU—VAULTING AMBITION ? *The Hindu* 3.8.89.

TEACHERS & TEACHING

Abdul Gaffor, P.K. The collective teaching learning process. *The Hindu* 15 8.89.

Amrik Singh. Academic selection : UGC's merit test. *The Times of India* 12 8.89.

Amrik Singh. Principals by rotation. *The Hindustan Times* 17.8.89.

Hasan Suroor. Conceptual flaws to two initiatives. *The Hindu* 18 8.89.

Khairozzaman, M.E Md. Teaching of 20th century Physics. *The Assam Tribune* 27 8 89.

Mathur, V.S. Discipline and the delinquent child. *The Hindu* 22.8 89.

Rajagopalan, T. IITs : Questions of incentives and autonomy. *The Hindu* 5.8.89.

Thiruvenkatachari, S Lacuna in teachers' pension package. *The Hindu* 15.8 89.

Urschel, Reinhard. Pupils work more than teachers. *The Indian Nation* 6 8.89.

EDUCATIONAL RESEARCH

Qazi, Moin. Is technical manpower socially effective ? *Patriot* 18.8.89.

REACH OF RESEARCH (*Editorial*) *The Economic Times* 28.8.89.

EDUCATIONAL TECHNOLOGY

Ray, N.K. Towards information age. *Deccan Chronicle* 24.8.89.

Sengupta, Sabyasachi. Teacher, student make educational telefilm. *Amrita Bazar Patrika* 15.8.89.

Sethuraman, K.R. CAL : Efficient method of teaching-learning. *The Hindu* 29 8.89 (CAL : Computer assisted Learning)

EDUCATIONAL EVALUATION

Mahadevappa, V. Examination maladies : Some suggestions. *The Hindu* 8.8.89.

Sreenivasa Rao, C. To remedy a worsening situation. *The Hindu*, 22.8 89.

ECONOMICS OF EDUCATION

SCHOOL DONATIONS (*Editorial*) *Patriot* 17.8.89.

STAGGERING DROP-OUT RATE (*Editorial*) *Deccan Chronicle* 11.8.89.

LIBRARIES & BOOKS

EPICS AND CRITICS (*Editorial*) *The Statesman* 26 8 89.

Puri, Rakshat. A literary index. *The Hindustan Times* 8.8.89.

Viswanathan, C.G. Ills afflicting the INB. *The Hindu* 29.8,89.

STUDENTS & STUDENT ACTIVITIES

Roy, Sunil C. China's student unrest not new. *The Indian Nation* 29.8.89.

PHYSICAL EDUCATION & SPORTS

Zachariah, Job. Scouting for sports talent. *The Indian Nation* 31.8.89.

ADULT EDUCATION

Kaul, H.N. Growing illiteracy in India. *The Pioneer* 2 8.89.

THE MAGIC OF LEARNING (*Editorial*) *The Times of India* 8 8 89.

Mishra, Laxmidhar. Adult education & national integration. *The Indian Nation* 21.8 89.

Shaw, E.C. Literacy mission. *The Pioneer*. 21.8 89.

Sharma, Mani. Adult literacy by 1990. *Amrita Bazar Patrika* 18.8.89.

STEMMING THE TIDE OF ILLITERACY (*Editorial*) *The Hindu* 16.8.89.

INSTITUTIONAL PROFILE

Anantha Krishna, K.S. Right blend of theory and practice. (Manipal Institute of Technology) *The Hindu*. 1.8.89.

Mishra, Ram Balak. Motilal Nehru Regional Engineering College, Allahabad. *Indian Expres* 31.8,89.

Muttoo, P.N. St. Francis' College : 100 years and after. *The Pioneer*. 8.8.89.

Sukhdev Singh. PAU a fruitful existence, *The Hindustan Times*. 10 8.89.

Venkataramani, G. ICAR : Relentless quest for excellence. *The Hindu* 20.8.89.

BIOGRAPHICAL PROFILE

Bhattacharya, Supriyo. Some legendary teachers of Calcutta. *Amrita Bazar Patrika* 20.8.89.

Sree Chitra Tirunal Institute for Medical Sciences & Technology

TRIVANDRUM-11

(An Institute of National Importance)

ADMISSION NOTICE

Post-doctoral Programmes : Academic Session Commencing January 1990

Qualified Indian nationals desirous of seeking admission to the various post-doctoral programmes commeucing on **January 1, 1990** are invited to apply in the prescribed form (non-transferable) which can be had of the Institute on request accompanied by a Bank Demand Draft of value of Rs. 10/- drawn in favour of Sree Chitra Tirunal Medical Sciences and Technology, Trivandrum. The request should clearly state the name of the candidate, the programme to which admission is sought and the particulars of demand draft (number, branch, bank and date of issue).

Programmes Offered

3 year DM Cardiology, DM Neurology and M. Ch. Cardiovascular thoracic surgery (2 seats each.)

3 year and 5 year (Less 1 year) M.Ch. Neurosurgery with 2 seats in all.

1 year Post-doctoral certificate in (a) Cardiovascular and Neurosurgical Anaesthesia and (b) Cardiovascular and Neuroradiology with 4 and 2 seats respectively.

Minimum educational qualification for entry

3 year DM programmes : MD in General Medicine or Paediatrics.

Note : Candidates with MD in psychiatry with a minimum of six months residency posting in General medicine and Neurology during the said course can apply for DM (Neurology).

3 year M.Ch. programmes : MS in General surgery.

5 year M.Ch (Neurosurgery) programme : MBBS degree and one year post-registration house surgeoncy/residency in general surgery from a University/PG Institute/Teaching hospital recognised by the Institute. Candidates selected under this provision will be entitled to one year exemption. Candidates without one year experience in general surgery (as mentioned above) need not apply.

Post-doctoral Certificate in Anaesthesiology/Radiology

MD/MS degree in Anaesthesiology/Diagnostic Radiology :

Note : All the aforesaid qualifications should have been obtained from an Indian University recognised by the Institute or from the National Board of Examinations or from any other board recognised by the Institute.

Only those who satisfy the minimum qualifications prescribed are advised to apply for admission. Those who expect to qualify before the date of selection may forward their application by the closing date prescribed. However, they will not be called for the selection test unless evidence of having obtained the necessary qualification is produced latest by 10th November 1989. Candidates with more than two failures in the university or equivalent examinations are not eligible for admission. Admission to the programmes will be based on the candidate's previous academic record and their performance in the selection tests to be held at the Institute on 17th & 18th November 1989.

Reservation exists for SC/ST candidates as per rules of the Institute. Suitability for admission (against reserved seats) will be assessed in independently of others. In case of non-availability of suitable SC/ST candidates the seats reserved will be diverted to general category.

Those selected will be paid emoluments as fixed by the Institute. The present value is Rs. 3150/- plus DA (MD/MS degree holders) and Rs. 2705/- plus DA for 5 year programme candidates during the first year.

The candidates will be provided with accommodation as per Institute's rules and regulations on the matter.

Closing Dates

Last date for issue of forms by post : **9th October 1989**
Last date for receipt of completed form at the Institute (along with non-refundable registration fee of Rs. 30/-) **16th October 1989**

The applications received beyond the last dates are liable to be rejected.

The details of qualifications, selection procedure, reservation, sponsorship, scholarship and general conditions will be as given in the prospectus for the year 1990.

DIRECTOR

CLASSIFIED ADVERTISEMENTS

KUMAUN UNIVERSITY, NAINITAL

Advertisement No. 560 **Dated : 28-8-1989**

Applications for the following posts are invited by 16.10.1989 on prescribed orm obtainable from the office of the Registrar, Kumaun University, Nainital-263 001 (UP) by sending a self-addressed (9" x 6") envelope and crossed postal order/bank draft for Rs. 15/- payable to Finance Officer, Kumaun University, Nainital. Money orders are not acceptable. Candidates who have already applied in response to Advertisement No. 1199 Dated 25-11-85, 1477 Dated 21-1-85, 302 Dated 30-5-87, 1156 Dated 29-9-88 for the post of Professor Economics, Advertisement No. 1156 Dated 29-9-88, 1839 Dated 25-1-89 for the post Reader Sanskrit need not apply again. They may however send the latest addition to their qualifications changes of address etc. If any.

Name of Department	No. of Post			Scale of Pay
	Professor	Reader	Lecturer	
. Economics	2 TLR	—	—	4500-7300
. Sanskrit		2 TLR	—	3700-5700
. Geography			1 Lv	2200-4000

Note : TLR implies temporary but likely to be regular
Lv implies leave vacancy.

Qualifications

. **For the Post of Professor**

Either—Eminent scholarship with published work of high quality and active engagement in research and ten years experience of teaching or research and experience of guiding research at doctorate level;

OR

Outstanding scholarship with established reputation for significant contribution to knowledge.

For the Post of Reader

(i) Good academic record with a doctorate degree or equivalent published work and active engagement in research or innovation in teaching methods or production of teaching materials, and

(ii) Five years experience of teaching or research including atleast three years as Lecturer or in equivalent position.

For the Post of Lecturer

Master's degree or an equivalent degree of a foreign University in the relevant subject with atleast 55 percent marks or its equivalent grade and consistently good academic record.

Further details regarding qualifications, service terms and permissible relaxations in qualifications will be provided with application form. Preference will be given to SC/ST and disabled candidates if otherwise considered suitable by the selection committee. Application form will not be sent by post after 7-10-89. Application received after due date and on plain paper are not acceptable.

R.C. Pant
REGISTRAR

G.S. SCIENCE ARTS & COMMERCE COLLEGE

KHAMGAON (M S.)
Distt. : BULDANA

WANTED

Applications are invited for the post for LIBRARIAN (OPEN CATEGORY)

1. **Qualifications**

(i) Good academic record with atleast 5 percent Marks at Master's Degree in a subject other than Library Science.

(ii) Master's Degeee in Library Science with first or Second Class.

Pay Scale : 700-40-1100-50-1600

Note : If candidates possessing above qualification are not available or not found suitable, candidates possessing lower qualifications in accordance with the provisions of Govt. G.R. No. USG/(1175) UNI-4, dated 14-8-1986 will be considered for appointment in the corresponding lower pay scale.

2. Must possess a Post Graduate Degree of M.A./M.Sc./M. Com. plus Degree or Diploma in Library Science. They should be incharge of libraries judged to be offering best services in terms of quantitative and qualitative library services, to be determined by the Director of Higher Education, Pune.

Pay Scale : 700-40-1100-50-1300

3. Must possess a post graduate degree of M.A./M.Com./M. Sc. plus Degree or Diploma in Library Science.

Pay Scale : 700-40-1100

Application on plain paper giving complete biodata alongwith copies of certificates and testimonials should be sent to the undersigned on or before 20.9.1989.

Dr. S.H. Jawandhia
PRINCIPAL

ANDHRA PRADESH AGRICULTURAL UNIVERSITY

ADMN. OFFICE, RAJENDRANAGAR,

HYDERABAD-500030

Advertisement No. 3/RC/89, **Dated : 2-9-1989**

Applications in the prescribed form together with a Registration fee of Rs.10/- are invited for the undermentioned posts of Professors/Associate Professors in the Faculties of Agriculture, Veterinary Science and Home Science in Andhra Pradesh Agricultural University, Administrative Office, Rajendranagar, Hyderabad-500 030 on or before 30-9-89 5-00 P.M.

Sl. No.	Name of the Post/Department	No. of Posts	
	FACULTY OF AGRICULTURE		
	Professor Cadre		
1.	Senior Scientist (Sugarcane)	1	
2.	Senior Scientist (Cotton)	1	
3.	Senior Scientist (Millets)	1	
4.	Professor of Agril. Engineering	1	
5.	Professor of Soil Physics	1	
6.	Professor of Extension	3	1 Post upto 23-6-1990 1 Post upto 23-6-1991
	Associate Professor Cadre		
1.	Plant Breeding	16	
2.	Agronomy	8	
3.	Entomology	9	
4.	Soil Science & Agril. Chemistry	3	
5.	Soil Physics	1	
6.	Agril. Engineering	5	
7.	Plant Pathology	9	
8.	Agril. Extension	8	
9.	Horticulture	10	
10.	Agril. Economics	4	
11.	Statistics & Mathematics	3	
12.	Plant Physiology	3	
	FACULTY OF VETERINARY SCIENCE		
	Professor Cadre		
1.	Professor of Pharmacology	1	
2.	Professor of Animal Reproduction and Gynaecology	1	Upto 14-5-1991
	Associate Professor Cadre		
1.	Anatomy	1	
2.	Veterinary Pathology	1	
3.	Parasitology	1	
4.	Immunologist	1	Upto 30-11-1991
5.	Helminthologist	1	Upto 30-11-1991
6.	Surgery	1	
7.	Poultry Science	1	
8.	Research Officer (L.R.S., Garividi, Vijayanagaram Dist.)	1	(Temporary likely to continue).
	FACULTY OF HOME SCIENCE		
	Professor Cadre		
1.	Human Development and Family Studies	1	
2.	Family Resource Management	1	
	Associate Professor Cadre		
1.	Foods & Nutrition	1	
2.	Human Development and Family Studies	1	
3.	Human Development and Family Studies (UND Project)	1	Upto 30-9-1991

Scale of Pay

Professor : Rs. 4500-7300
Associate Professor : Rs. 3700-5700

Reservations

The following vacancies are reserved for SC, ST and BC candidates in the Associate Professor cadre.

Faculty of Agriculture

SC-21 (including backlog vacancies), ST-12 (including backlog vacancies), BC-A-5, BC-B-4, BC-C-1, BC-D-3.

Faculty of Veterinary Science

SC-2 (including backlog vacancies), ST-1 (backlog vacancy), BC-C-1, BC-D-1

Faculty of Home Science

SC—1 (backlog vacancy), ST—1.

Note : 1. In case sufficient candidates belonging to SC and ST communities are not selected in one discipline, the same is likely to be made up in other disciplines of the Faculty.

2. The University reserves the right not to fill all or any of the vacancies notified.

Application forms together with full details regarding qualifications prescribed for the posts and other particulars can be had from the University on payment of Rs. 10/- in person or through a crossed Demand Draft from any branch of State Bank of India, State Bank of Hyderabad and Andhra Bank in favour of the Comptroller, Andhra Pradesh Agriculture University, Rajendranagar, Hyderabad-500 030 payable at State Bank of Hyderabad, Rajendranagar Branch. NO POSTAL ORDERS will be entertained. A self-addressed and stamped envelope of Rs. 2.50 size 35 cm x 15 cm superscribed "Requisition for application form" and addressed to Registrar, Administrative Office, A.P. Agricultural University, Rajendranagar, Hyderabad, should be enclosed.

The last date for receipt of applications is 30.9.89 (5.00 P.M.)

Prof. S.M. Siddiqui
REGISTRAR

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SAMBALPUR UNIVERSITY : JYOTI VIHAR

BURLA : SAMBALPUR

ORISSA PIN—768019

Advertisement No. 15016/Estt-III **Dated : 23.8.89**

Applications are invited in the prescribed form for the following posts in the P.G. Department of Business Administration, Sambalpur University, Jyoti Vihar, Orissa so as to reach the undersigned on or before 30th September, 1989.

	Name of the Post	No. of vacancy	Reserved ST	Reserved SC	Unreserved	Specialisation(s)
(i)	**Professor**	3	1	1	1	(a) Financial Management (b) Production and Quantitative Techniques. (c) Principles of Management Organisation Behaviour.
(ii)	**Reader**	5	1	1	3	(a) MIS & Computer Applications and Research Methods. (b) Marketing, Economics Small Business Management. (c) Business Environment and Business Law. (d) Principles of Management, Behavioural Science and Business Policy, Personal Management. (e) Accounting and Finance.
(iii)	**Lecturer**	6	2	1	3	(a) Computer Application and Finance and Accounting. (b) Operations Research and Computer Applications. (c) Organisation Behaviour, Industrial Psychology. (d) Business Environment and Business Law, Labour Management Relations. (e) Principles of Management, Entrepreneurship Management. (f) Marketing.

(Note : 1. The vacancies reserved for ST (or SC), S.C. candidates would also be eligible for consideration in the event of non-availability of suitable ST candidates and vice-versa.

2. ST denotes Scheduled Tribes and SC denotes Scheduled Castes).

The prescribed application forms and full details regarding terms and conditions, qualifications and experience etc. can be obtained from the University Office on any working day on cash payment of Rs. 25/- (Rupees twenty five) only (Rs. 6.25 for candidates belonging to SC/ST) in person or on requisition accompanied by (i) Bank Draft of Rs. 25/- (Rs. 6.25 for candidates belonging to SC/ST) drawn in favour of Comptroller of Finance, Sambalpur University payable to either in the State Bank of India, Burla or U. Co. Bank, A. Katapali. Bank drafts of other banks will not be entertained. (ii) Self-addressed envelope (25 cm x 10 cm) affixing postage stamp worth Rs. 8.80 superscribing with the words "APPLICATION FORM FOR TEACHING POSTS IN SAMBALPUR UNIVERSITY" on it.

Candidates staying abroad may apply on plain paper furnishing bio-data and qualification with copies of supporting documents (7 sets of applications and documents). Such candidates may be considered in absentia if they make written requests for the same.

All correspondences with this regard be made by designation and not by name.

T.B. Sushari
REGISTRAR

Advertisement

Applications are invited for the post of one Senior Research Investigator to work on the scheme entitled "Secularism, Religious Communalism and Civilization" (ICSSR). The selected candidate will be given a consolidated salary of Rs. 1000/- p.m. for a period of 1 (one) year.

Qualifications : Candidates having a Master's degree and conversant with traditional tribal cultures of the North East will be preferred.

Plain paper application should reach the undersigned by 21.9.89.

Prof. (Mrs.) S. Miri,
Department of Philosophy,
NEHU, NONGTHYMMAI,
Shillong—14.

THE UNIVERSITY OF BURDWAN
RAJBATI : BURDWAN

WEST BENGAL

Advertisement No. 7/89-90

Dated : August 25, 1989

Applications in the prescribed form are invited for the following posts :

A. Secretary, Faculty Council for Post-Graduate Studies in Science ... One post

B. Lecturer in Chemisty ... One post

C. Lecturer in French ... One post

D. Part-time Lecturer in German ... Two posts

E. Part-time Lecturer in Sociology ... Four posts

Scale of Pay

For A : Rs. 1200-50-1300-60-1900/- plus dearness and other allowances and pensionary benefits according to the Rules of the University.

For B & C : Rs. 2200-75-2800-100-4000/- plus dearness and other admissible allowances and pensionary benefits according to University Rules.

For D & E : Rs. 150/- per month plus conveyance allowance as admissible under the Rules of the University.

Minimum Qualifications

For post indicated at 'A'

(a) Essential

(i) Uniformly good academic record with a B+Master's Degree or its equivalent.

(ii) At least 10 years' experience in a position involving supervision, control and planning of examinations, Administration of Colleges or in an Institute of Higher Learning or Government or other academic bodies. At least 5 years of the 10 years' experience should be in higher position of high level administration.

(iii) Age not less than 35 years. Relaxable in case of exceptionally qualified candidates.

(b) Desirable

(i) A Doctorate Degree or published paper of high standard;

Or

(ii) Experience of at least 10 years in a fairly Senior position in any academic Institution like a College or a University or a Research Organisation.

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80 Noronha Road, Cantonment Kanpur-208 004

For post indicated at 'B' & 'E'

(a) A Doctor's Degree or research work of an equally high standard; and

(b) Good academic record with at least Second Class (C in the seven point scale) Master's Degree in a relevant subject from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing inter-disciplinary programmes, the degrees in (a) and (b) above may be in relevant subjects;

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of qualifications prescribed in (b) above;

Provided further that if a candidate possessing a Doctor's Degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record, (weightage being given to M.Phil. or equivalent degree or research work of quality) may be appointed provided he has done research work for at least two years or has practical experience in a research laboratory/ organisation on the condition that he will have to obtain a Doctor's Degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increment until he fulfils these requirements.

For the post indicated at 'C' & 'D'

(a) A doctor's Degree or research work of an equally high standard; and

(b) Good academic record with at least Second Class (C in the seven point scale) Master's Degree from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing inter-disciplinary programmes, the degrees in (a) and (b) above may be in relevant subjects;

Provided that if the Salection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of qualifications prescribed in (b) above;

Provided further that if a candidate possessing a Doctor's Degree or equivalent research work is not available or is not considered sultable a person possessing a good academic record may be appointed provided he has done one year post M.A. diploma course in the teaching of foreign language concerned from a University on the condition that he will have to obtain a Doctor's Degree or give evidence of research work of equivalent high standard within eight years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements

Desirable Qualification : Specialisation or Proficiency

For Post 'B' : Inorganic Chemistry

For Posts 'C', 'D' & 'E' : Any branch of the subject.

Those who do not fulfil the minimum qualification need not apply. The choice of the Selection Committee may not necessarily be confined to those who apply formally.

Those who applied in response to advertisement No. 18/88-89 dated 10.5.89 for the post indicated at 'A' need not apply afresh.

Prescribed application forms may be obtained from the office of the Registrar, University of Burdwan personally on payment of Rs. 10/- in cash at the University Sales Counter from 11 A.M. to 12 Noon on Saturday and 11 A.M. to 1-30 P.M. oh other working days or by sending a self-addressed stamped envelope (11" x 5") accompanied by Crossed Indian Postal Order of Rs. 10/- in favour of the Finance Officer, University of Burdwan.

Last date for submission of application with requisite fee of Rs. 5/- is **October 5, 1989.**

M. Chatterjee
REGISTRAR

IT PAYS TO ADVERTISE IN UNIVERSITY NEWS

AWADHESH PRATAP SINGH VISHWAVIDYALAYA

REWA (M.P.)

Dated : 31-8-89

No. Karmik/89/954

Applications are invited in the prescribed form for the following posts, so as to reach the undersigned on or before 30-9-89 alongwith Rs. 10/- as Application fee by crossed Indian Postal Order in favour of the Registrar, A.P.S. University, Rewa M P. 486003.

S. No.	Name of the Post and Department	No. of Posts	Pay Scales
1.	**Department of Chemistry**		
	Professor (Organic Chemistry)	1	4500-7300
	Lecturer (Inorganic Chemistry)	1	2200-4000
2.	**Department of Physics**		
	Lecturer (One for Solid State Electronics and other for high energy Physics)	2	2200-4000
3.	**Department of Psychology**		
	Reader (Indian Psychology/Organisational Psychology)	1	3700-5700
4	**Department of Ancient Indian History, Culture and Archaeology**		
	Lecturer (Field experience in Archaeology excavation and exploration)	1	2200-4000
	Department of Mathematics & Statistics		
	Reader (Statistics linear statistical inference, multivariate Analysis Stochastics processes Biometrics)	1	3700-5700
	Lecturer (Statistics as above for the post of Reader)	1	2200-4000
	Department of Languages		
	A—Russian Languages		
	Reader	1	3700-5700
	B—English		
	Professor	1	4500-7300
	Lecturer	2	2200-4000
7.	**A—Senior Technical Asstt.** For Psychology Deptt. (Experience of handling psychological Instruments).	1	1500-2680
	B—Senior Technical Asstt. For Deptt. of A.I.H.C. and Archaeology (Experience of handling tools, knowledge of archaeological exploration and excavation and ancient Indian Sculpture and architecture.)	2	1500-2680

The minimum essential qualifications for the above posts are the same as are prescribed by the University Grants Commission.

Reservation for SC/ST

1. 15% for SC and 7½% for ST out of the total number of teaching posts specified above.
2. One post for SC/ST candidates out of the above non-teaching posts.

The prescribed forms of application in 8 copies together with details of qualifications, experience etc. can be obtained from the undersigned on payment of Rs. 10/- in person or by sending crossed Indian Postal Order of Rs. 20/- (payable to the Registrar, A.P.S. University, Rewa M.P.) for obtaining the forms by registered post.

The University reserves its right to fill in or not to fill the advertised posts. No T.A. and D.A. will be paid for attending interview.

Candidates in employment should send their application through proper channel. All appointments will be made on probations for two years.

Candidates applied earlier for the above posts in response to our advertisement No. Karmik/89/427, dated 11-5-89 need not apply again.

Dr. Krishnaji Tiwari
REGISTRAR

AWADHESH PRATAP SINGH UNIVERSITY

REWA (M.P.)

No. Karmik/89/940

Dated : 30-8-89

ADVERTISEMENT

Applications in the prescribed forms are invited for the following posts in the University Science Instrumentation Centre so as to reach the undersigned on or before 30-9-1989 along with an application fee of Rs 10/- by I.P.O./Bank Draft.

S. No.	Name of the post	Pay Scale	Qualifications
(1)	(2)	(3)	(4)
1.	**Senior Scientific Officer (One Post)**	Rs. 1100-50-1600 (U.G.C.—likely to be revised).	**Essential :** At least second class post-graduate degree in Engineering or Science with 5 years experience in R/D of instruments or in operation, repair and maintenance of modern instruments. Note—Experience can be relaxed if otherwise qualified.
2.	**Scientific Officer (One Post)**	Rs. 700-40-900-E.B.-40-1100-50-1300 (U.G.C.—likely to be revised)	Essential : At least second class B.E./B Tech./ M.Sc with 2 years experience in operation of sophisticated instruments/repair and maintenance of modern instruments Desirable—A flair for R/D activity in instrumentation. OR Diploma in Engineering / B Sc. with 8 years experience in operation of sophisticated instruments/repair and maintenance of modern instruments. **Note :** Experience can be relaxed if otherwise qualified.
3.	**Senior Technical Assistant (One Post)**	Rs. 550-25-750-E.B.-30-900 (U.G.C.—likely to be revised).	**Essential :** Second Class B.E./B. Tech./M.Sc. or a diploma in Engineering or Electronics, B Sc. with 3 years experience in operation of modern instruments and their repair and maintenance/ assistance in R/D in instrumentation (Candidates will be tested for their aptitude in instrumentation). OR Diploma in Mechanical Engineering with 5 years experience in workshop practice and ability to lead and supervise the work of a group. (Candidates will have to pass a trade test). Candidates with additional Experience of Supervisory work in a mechanical workshop will be preferred. OR 10 years schooling followed by 10 years experience in glass blowing workshop practice passing trade tests essential (grade joints, making vaccum apparatus, use of glass lathe-quartz work etc. to be included in the trade tests).
4.	**Technician 'B' Mech. (W/S) (One Post)**		Certificate course from ITI with 5 years experience.
5.	**Technician 'C' Mech. (W/S) (One Post)**		Certificate course from ITI with 7 years experience.
6.	**Technician 'B' (Glass blowing) (One Post)**		10 years schooling and 2 years experience.
7.	**Technician 'C' (Electronics) (Two Posts)**		Certificate course from ITI in Electronics/ Electrical engineering with 5 years experience.

Scales : Technician 'C' : Rs. 380-12-500-E.B.-15-560 (U.G.C.—likely to be revised).

Technician 'B' : Rs. 320-8-400-10-450 (U.G.C.—likely to be revised).

(1)	(2)	(3)	(4)
8.	**Storekeeper-cum-Typist (As per University Scale)**	Rs. 1200-30-1800	**Essential** : Science graduate with 5 years experience in storekeeping in research laboratories/ educational institutions or industry and typing speed 25 w.p.m.

Reservation : Two posts for SC and Two posts for ST candidates out of the total posts detailed above.

2. Application form can be obtained from the University office on payment of Rs. 10/- in person or by sending a Crossed Indian Postal Order/Demand Draft of Rs. 20/- payble to the Registrar, Awadhesh Pratap Singh University, Rewa (M.P.). Additional 10/- is for registration/postal charges.

3. Candidates applied earlier in response to our advertisement No. Karmik/87/818, Dated 24-4-87 for the above posts need not apply.

4. The University reserves its right to fiil in or not to fill the advertised posts.

REGISTRAR

AWADHESH PRATAP SINGH VISHWAVIDYALAYA

REWA (M.P.)

No. Karmik/89/942 **Dated : 30-8-89**

ADVERTISEMENT

Applications are invited in the prescribed forms available fr om the university office on payment of Rs. 10/- in cash or by Indian Postal Order or by Bank Draft in favour of the undersigned for the following posts in the Computer Centre so as to reach the University Office on or before 30-9-1989. The candidates who desire to get the prescribed application forms by Registered post (Not by ordinary post) should send and additional amount of Rs. 10/- for postal charges. The application forms must reach on or before 30.9.89 alongwith a payment of Rs. 10/- as application fee.

Details of the Posts

S. No.	Name of Post	No. of Post	Scale of Pay	Qualifications
1.	System Incharge	One	Rs. 1100-1600 (Likely to be revised)	Essential—B.E./B. Tech with Computer Science. Desirable—M.E./M. Tech. with Computer Science. Experience—2-3 years (preference of having experience in installations)
2.	Programmer	One	Rs. 700-1600 (Likely to be revised)	B.E. /B. Tech., M.A./M.Sc. with Physics, Mathematics and Applied Science, 1-2 years working knowledge of Computer operation applications.
3.	Computer Operator	One	Rs. 425-700	Bachelors Degree with Maths, Physics and Applied Sciences or Diploma in Computer Science Working knowledge of Computer desired.
4.	Technical Asstt.	One	Rs, 425-700 (Likely to be revised)	Diploma in Electrical/Electronics.

Reservation : One post for SC and one post for ST Candidates out of the total posts specified above.

These posts are under U.G.C. Scheme for a period of five years but are likely to be continued. All the posts carry the benefits of Dearness Allowance, leave, etc. as per university rules. The university reserves its right to fill in or not to fill the advertised posts.

Candidates applied earlier in response to our advt. No. Karmik/86/Computer/151, dated 9-1-86 for the above posts need not apply again.

Dr. Krishnaji Tiwari
REGISTRAR

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